Advanced Data Management & Analysis Branch Code587

Branch Technical Status Report

June 24, 2004

James Byrnes

Agenda

- Organizational Development Odyssey
- Staffing
- Project Summary

Organizational Development(OD) Odyssey

- Timeline
  - October, 2003 Decided to have a retreat in Jan/Feb.
  - November, 2003 Email OD Services Request to OHR
  - January, 2004 Called OD Contact in OHR
    - Met with Andrea Able and Kathy Dinsmore
    - Agreed to hold the retreat after the ISD Retreat (June, 2004)
    - OD Service planned to interview branch members to gather inputs on retreat topics
  - May, 2004 Lori Moore assigned to Retreat Planning
- Held three focus group meeting with branch members to gather information
  - Session were run by OHR's Organizational Development Group
    - Lori Moore & Edie Seashore (Contractor)

Organizational Development Odyssey

- Primary Issues
  - Matrixed Effect
    - People in the branch generally don't work together
    - New staff member have stronger ties to the home organization
    - Need to become more project based - Project by project with negotiations between both parties
    - Difficult to serve Multiple Projects
    - Improvement would be t go back to the way things were and no full cost
    - Scientific customer expectations not what Code 587 wants.
    - Time away from matrixed office is like being on leave since salary is paid by matrixed organization
  - Team (Branch Development)
    - What's the benefit to bringing the group together
    - Build community networking
    - Want to work in groups - having a partner to bounce ideas off of in a good thing
    - Do not lean on one-another because of funding constraints
    - List languages everyone should know

587 Staff Transitions

- No Full-Time assignment changes
- Kathryn Rash (Coop) Full-time for the summer
- Chris Howard (Myerhoff Intern) returns for the summer
  - Both supporting Peer to Peer IRAD Prototype

Project Profile

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Project	Code	Apr	May	Jun	CS	²CS	SSC	Comments
ESDIS/EDIO	423	G	G	G	1	0		R. Boller may support the production of an outreach DVD in partnership with the SVS
P2PSDE	587	G	G	G	0.8	0	0.2	The foundation of the P@PSDE pltform is complete. Including the following JAVA Classes SDEgroupMembership, SDEcontentManager, SDEgroupDiscovery, & SDEpeerDiscovery. Implementation of SDEserverPeer, CMSserverPeer, SOAPserverPeer, & SDEbrowserPeer have started (C. Howard and K. Rash supporting)
ADMA	587	Y	Y	Y	1	0		Still trying to find a partnership for Quantum Computing Research
NGTRDM	632	G	G	G	1	0		Developed a convertion routine to convert CDF datasets into a compatible format for the Space Radiation models. Includes a change in resoluation from 8s to 1m.
SSVL	632	G	G	G	0.6	0		Provided 2-D and 3-D animations for the Geospace Environment Modeling (GEM) conference Adding functionality to 2-D/3-D MHD exploration tool.
LASP	680	Y	Y	G	1			Funded for remianer of FY04 - May still be an issue for FY05
LEP	690	G	G	G	1	0		OnGoing
CASSINI_CAPS	692	Y	Y	Y	0	0		Backfill w/ Corporate Hire Arrives July 12
ViSBARD	692	G	G	G	0.4	0		Tested ViSBARD on a large-screen (roughly 10'x5') stereoscopic display (GeoWall) Compared MHD models BATS-R-US against LFM using simulated MagCon orbits
SWE	692	G	G	G	0.2	0		Science Data Processing system on WIND/SWE had a major failure. Supporing the reconstruction and testing of the restored system.
Total					7	0		

Project Profile

Advanced Data Management & Analysis

Project	Code	Apr	May	Jun	CS	²CS	SSC	Comments
MTCT	692	G	G	G	0.3	0		On-Going
CCMC	696	G	G	G	2.4	0		Next Slide
CMDPS/ST-5	696	G	G	G	0.3	0		OnGoing
SVS	930	G	G	G	1	0		SVS Database: Design process continuing due to changing requirements. All SVS animations are imported into a test database All Animated Earth visualizations are imported into the development database (this is the live database on the development web server). Command line programs have been created to view and delete animations from the new database GUI prototype development is in initial stages.
HPC	930	G	G	G	1	0		OnGoing
HHT	971	G	G	G	0.5	0		The first draft version of the MATLAB package of Hilbert Huang Transformation (HHT) Technology application is generated. The package contains 154 standardized MatLab routines and the Reference Guide that describes their functionality. It is scheduled to be delivered in its final form by the end of August 2004.
ANACM	971	G	G	G	0.5	0		Generation of the parallel fine resolution Ocean-Ice-Biological Model is in its testing phase. After analysis of two successful experiments of the Model that were performed on NCCS large-scale distributed-memory parallel machine HP/COMPAQ Alpha Server CS45 using 64 processors, the third experiment was prepared, but its execution has been delayed because of the unavailability of the NCCS machines.
LIS	974	G	G	G	2	0		Submitted Milestone G -- second code improvement. LIS runs globally at 1km resolution with a performance of approximately 3-4 simulated days per day. It is currently under review by the Computational Technology (CT) review team. Started working toward Milestone J -- interoperability. Incorporating ESMF functionality into LIS.
Total					8	0		

CCMC Highlights

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- Implemented new web site hit statistics and usage statistics for our online data analysis tools
- Created a plan for future implementation on new Runs on Request number and file naming conventions
- A second space weather model (UCLA - Geospace General Circulation Model or GGCM) has been integrated into the CDF conversion software.
- Developed specialized analysis tool that utilizes converted BATSRUS CDF data to assist in finding magnetic neutral points in simulation data with increased proficiency. Results from analysis were presented at 2004 Spring AGU
- Gave a presentation for the LEP/SEC Seminar Series. Title was Data Format Standardization of Space Weather Model Output in the Community Coordinated Modeling Center. Presentation was well received and generated a lot of interest within 690, NSSDC, NASA HQ, and NSF. Presentation has led to collaboration efforts between the VSPO Virtual Observatory and the CCMC.

Acronyms

ANACM	Arctic-North Atlantic Climate Modeling
CCMC	Community Coordinated Modeling Center
CDF	Common Data Format
CMDPS	Common Magnetometer Data Processing System
DODS	Distributed Oceanographic Data System
ESDCD	Earth and Space Science Computing Division
FITS	Flexible Image Transport System
GrADS	Grid Analysis and Display System
GRIB	Gridded Binary
HDF	Hierarchical Data Format
IDL	Interactive Data Language
KP	Key Parameter
LASP	Laboratory for Astronomy and Solar Physics
LDAS	Land Data Assimilation System
LEP	Laboratory for Extraterrestrial Physics
LIS	Land Information System
LHEA	Laboratory for High Energy Astrophysics
LSM	Land Surface Model
LWS	Living with a Star
MPI	Message Passing Interface
MTCT	Multi-spacecraft Time Series Correlation Techniques
NetCDF	Network Common Data Forma
OD	Organizational Development
P2PSDE	Peer-to-Peer Science Data Environment
PI	Principle Investigator
PWG	Polar, Wind & Geotail
SEC	Sun Earth Connectionns
SVS	Scientific Visualization Studio
ViSBARD	Visual System for Browsing, Analysis, and Retrieval of Data

587 Staffing Overview

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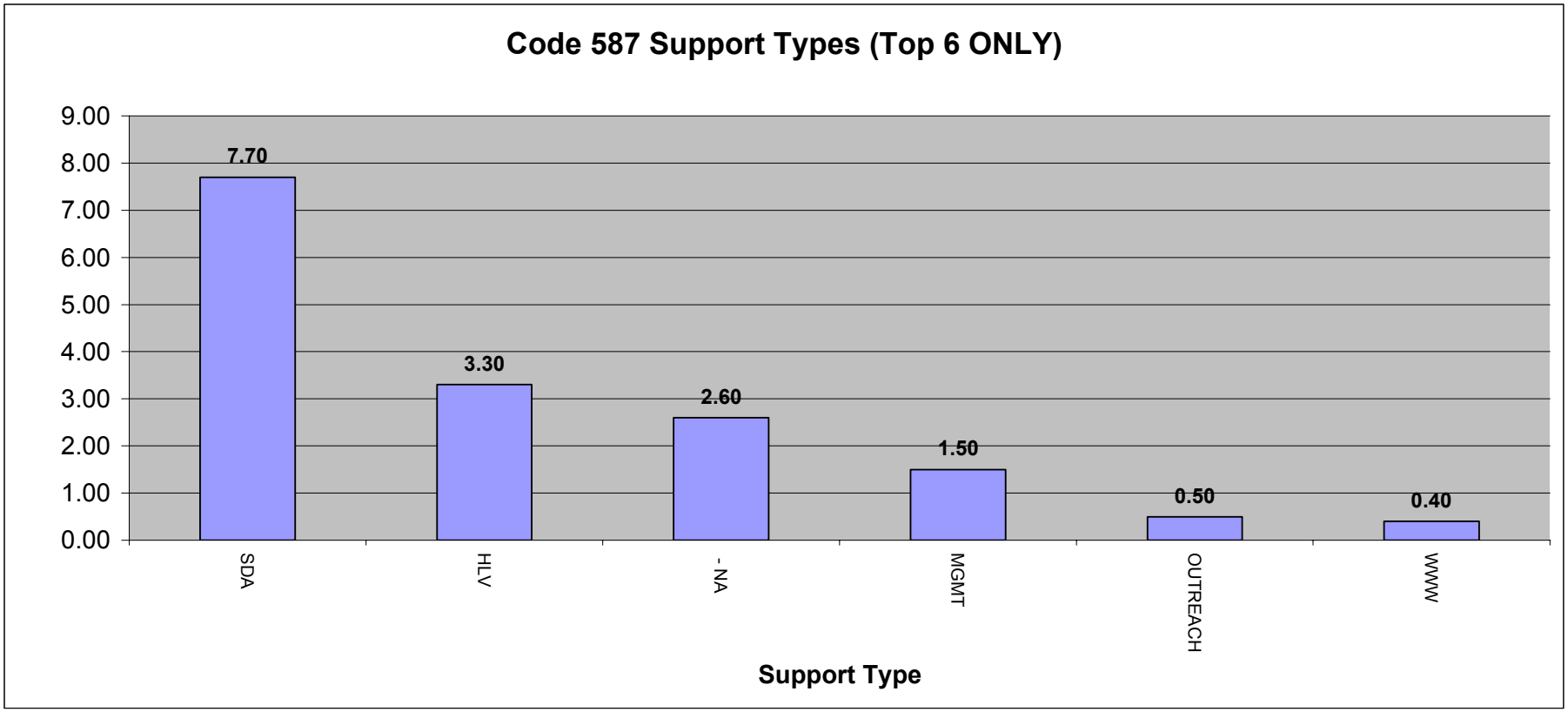

587 Staffing Overview

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